CATALYST™ Version 02.1 Web Posting Release Notes

What is CATALYST™ Version 02.1?

CATALYST™ VERSION 02.1 is ATI's software and services suite that enhances and accelerates the ultimate visual experience. CATALYST™ Version includes four elements: the latest driver, the latest version of MULTIMEDIA CENTER™, the latest version of HYDRAVISION™, and the latest support for ATI's REMOTE WONDER™ product.

Operating systems supported by CATALYST™ Version 02.1 display drivers.

The CATALYST™ Version 02.1 display driver is designed to support the following Microsoft Windows platforms:

- Windows XP
- Windows 2000
- Windows 98/98SE and Millennium Edition (ME)

Features of ATI CATALYST™ version 02.1

New ATI Control Panels Directory

This feature allows for different version of the drivers to co-exist. This allows as hierarchy drivers which are installed on directories using build numbers. Further, the ATI Control Panel is installed into its own directory becoming a stand alone product. This allows for ATI Control Panel to be forward and backward compatible from this release onward.

SMARTGART™

ATI's proprietary diagnostic tool to determine the most stable AGP setting, making the most stable drivers in the industry even more stable.

SMARTGART™ automatically tests the AGP compatibility upon the initialization of the display driver, and dynamically determines the proper AGP bus speed based on the results of the test. If a new AGP setting is required and the system must reboot, the driver will automatically set the new bus speed on the next reboot.

The diagnostic tests will only be run on the system when the driver is installed for the first time, or when the system configuration is changed.

New Direct3D™ and OpenGL® control panels for all RADEON™ class products

The Direct3D, OpenGL and Options pages of the control panel have undergone drastic changes in order to make ATI's control panel more consistent, user-friendly, and most importantly, more functional.

Remote Wonder™ 1.2

Provides users with a Pre-Defined plug in for WINAMP and MICROSOFT® POWERPOINT (plus many more to come in the future!)

HYDRAVISION™ version 3.1

Hydravision 3.1 is ATI's desktop management software. It allows users to control multiple displays and windows. New feature in Hydravision 3.1 include following:

- New installation wizard to help users get their multi-monitor setup working as quickly as possible.
- Transparent Windows and Menus
- Windows fade-in and fade-out
- Always-On-Top
- Mouse Scroll Wheel for MultiDesk Selection
- MultiDesk Floating Menu
- Move to Monitor feature
- Explore Extension feature

ATI Component Output support with Radeon™ 8500 class of products

ATI's HDTV Component Video Adapter provides analog component output support for RADEON 8500 class of products, including ALL-IN-WONDER RADEON 8500 products. It converts standard DVI-I or VGA from your RADEON 8500 family of card and converts it to analog component output for display on a High Definition Television (HDTV) or any other component input device.

Multimedia Center™ (MMC) 7.7

Offers new skin option "Tranquility", DVD Chapter Preview feature, and support for SVCD compliant capture.

Feature improvements

The latest ATI display driver provides users with a stable, user-friendly, and flexible software experience. From supporting the latest 3D architecture and features, to full multimedia acceleration and DVD playback: The latest ATI display driver will provide users with the ultimate in graphics acceleration.
Feature improvements in this release include the following:

- Direct 3D API graphics acceleration support
- OpenGL API graphics acceleration support
- Amazing performance
- Support of all the latest ASIC features

Direct 3D API graphics acceleration support

Direct 3D acceleration includes support of all the latest features found in the Direct 3D specification. This allows our ASICs to accelerate the latest amazing 3D graphics effects found in the most popular games.

OpenGL API graphics acceleration support

OpenGL acceleration includes support of all the latest features found in the OpenGL specification. This allows our ASICs to accelerate the latest amazing 3D graphics effects found in the most popular games.

Amazing Performance

The latest ATI control panel for both D3D and OpenGL provide users with the ability to select a high performance user experience by enabling "High Performance" textures, and "High Performance" mipmap detail levels.

Support of all the latest ASIC features

Both D3D and OpenGL support amazing technologies such as:

- TRUFORM™
- SMARTSHADERS™
- SMOOTHVISION. ™
- Anisotropic Filtering™

TRUFORM™

ATI presents TRUFORM™, the revolution of graphic technology. TRUFORM™, a new technology developed by ATI, overcomes traditional memory and bandwidth problems to deliver the smoothest and most realistic images ever seen on a PC. Pre-processes 3D artwork being fed into the graphics accelerator by converting it from flat triangle data into curved surface data, allowing much more highly detailed and realistically lit images with virtually no performance loss.

SMARTSHADER™

SMARTSHADER™, a new technology developed by ATI, represents a new generation of visual effects for your personal computer. With SMARTSHADER™, game developers will be able to create impressive, life-like worlds by modeling the surface and material qualities of 3D objects with an unparalleled level of realism.

This technology revolutionizes the graphics pipeline by making both the geometry processing and pixel processing stages more programmable than ever before, and allowing developers to easily create amazing new graphics effects while maintaining a high level of performance.

SMOOTHVISION™

SMOOTHVISION supports a High-Performance anti-aliasing mode and a High-Quality anti-aliasing mode. Both of these modes give users the ability to choose between 2x, 3x, 4x, 5x, and 6x sampling, allowing for a total of 10 different anti-aliasing settings.
This allows users to quite easily select both the desired level of visual quality and the corresponding performance level.

Anisotropic Filtering

Improves image quality by blending multiple texture samples together, resulting in 3D scenes that are crisp and detailed. The number of samples used can be: 2, 4, 8, or 16. 16X Anisotropic Filtering provides the ultimate in texture fidelity and detail, while maintaining a incredible level of performance.

Issues resolved in the CATALYST™ Version 02.1

- ATI TV program displays back video inputted to ATI All-In-Wonder Radeon product if Operating System is Windows XP and there is secondary PCI graphics card installed/enabled.

- The system hangs when exiting from standby mode in systems with Windows XP, apparent both on I845 and KT266 chipsets.

- 3DMark2001SE in Windows XP displays texture corruption when FSAA is enabled

- First restart after installing display drivers, WDM components do not install. If the user reboots the system a second time, then the WDM components install.

- Starting up a new game of Medal of Honor displays vertical lines and corruption in menus while playing game.

Open issues

This section provides a brief description of the open issues associated with CATALYST™ version 02.1

Limitations of Component Output

- Component Video - Corruption with full screen DOS Box (98SE)

- *Entire Image not visible on the display:* TVs overscan images, typically 5%, and this can result in part of the image being cut off the display. The amount of the image not seen will vary with each HDTV and between each timing chosen, for example more overscanning may be noticeable with 1080i than 480i. The effect is minimized with 720p, therefore, if your HDTV supports 720p, it is recommended to use this mode.
  ATI is working on a software update for Component Output to overcome the limited number of modes supported by certain lower quality HDTV's.

- DVDs will not play in 720p or 1080i mode: Macrovision protected DVDs will not play in 720p or 1080i mode, the supported modes are 480i and 480p. This is a limitation of CSS-encryption enforced by Macrovision.

- Upon starting system/reboot there is no display: A component output display will not be visible until the Windows display is enabled; this may take several minutes. Component output display is not supported in DOS.

- Other Checks: Ensure that the HDTV Component Video Adapter is connected, that the Y-Pr-Pb cables are connected properly and that the HDTV is set for YPrPb input.

- Single Display: Component Output is a single display feature and will not work simultaneously with TV Output (ALL-IN-WONDER cards) or with VGA monitors (Graphics only cards).

Other issues

- Texture corruption in D3D mode when running Serious Sam game. Water textures and Building textures (temple) will flicker and shift around on screen.
- In Grand Theft Auto 3, the display turns completely white when fog is rendered, making the game unplayable. This occurs in Windows ME and Windows 2000.